

**ABSTRACT OF THE DISCLOSURE**

To provide a wavelength multiplexing on-chip optical interconnection circuit, an electro-optical device, and an electronic apparatus, wherein a signal transmission speed can be enhanced, fineness can be easily accomplished, and they can be simply manufactured, the wavelength multiplexing on-chip optical interconnection circuit includes a plurality of circuit blocks provided on one integrated circuit chip; and an optical waveguide provided on the integrated circuit chip, as a transmission line to transmit a plurality of light components having different wavelengths  $\lambda_1$  and  $\lambda_2$  between the circuit blocks.